

0133
0328

#7

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/909,567B

DATE: 04/08/2002

TIME: 14:42:42

Input Set : N:\Crf3\03272002\I909567.raw

Output Set: N:\CRF3\04082002\I909567B.raw

1 <110> APPLICANT: Macina, Roberto A.
 2 Nair, Manoj
 3 Chen, Seiyu
 4 <120> TITLE OF INVENTION: Compositions and Methods Relating to Lung Specific Genes
 5 <130> FILE REFERENCE: DEX-0214
 6 <140> CURRENT APPLICATION NUMBER: US/09/909,567B
 7 <141> CURRENT FILING DATE: 2001-07-20
 8 <150> PRIOR APPLICATION NUMBER: 60/219,834
 9 <151> PRIOR FILING DATE: 2000-07-21

10 <160> NUMBER OF SEQ ID NOS: 56
 11 <170> SOFTWARE: PatentIn version 3.1

13 <210> SEQ ID NO: 1

14 <211> LENGTH: 1449

15 <212> TYPE: DNA

16 <213> ORGANISM: Homo sapien

17 <400> SEQUENCE: 1

18	ctgggagtg	atttcataca	ttcgtggagg	tggtgagagg	atatactacg	cagactctgt	60
19	gaggggccga	ttcaccgtct	ccagggacaa	cgccaagaac	tcaactctatc	tgcaaatgaa	120
20	cagcctgaga	gccgaggaca	cggtctgtta	tttctgtgcg	agagagccac	cagcacccaa	180
21	ttactttgac	tgctggagcc	agggaaacct	ggtcaccgtc	tcctcagctt	ccaccaagg	240
22	cccatcggtc	ttccccctgg	cgccctgctc	caggagcacc	tctgggggca	cagcggccct	300
23	gggctgcctg	gtcaaggact	acttccccga	accggtgacg	gtgtcgtgga	actcaggcgc	360
24	cctgaccagc	ggcgtgcaca	ccttcccggc	tgtcctacag	tcctcaggac	tctactccct	420
25	cagcagcgtg	gtgaccgtgc	cctccagcag	cttgggcacc	cagacctaca	cctgcaacgt	480
26	gaatcacaag	cccagcaaca	ccaagggtga	caagagagtt	gagctcaaaa	ccccacttgg	540
27	tgacacaact	cacacatgcc	cacggtgccc	agagcccaaa	tcttgtgaca	cacctcccc	600
28	atgcccacgg	tgcccagagc	ccaaatcttg	tgacacacct	cccccatgcc	cacggtgccc	660
29	agcacctgaa	ctcctgggag	gaccgtcagt	cttctcttct	cccccaaaac	ccaaggatac	720
30	ccttatgatt	tcccggaccc	ctgagggtcac	gtgcgtgggtg	gtggacgtga	gccacgaaga	780
31	ccccgaggtc	cagttcaagt	ggtacgtgga	cggcgtggag	gtgcataatg	ccaagacaaa	840
32	ggcggggag	gagcagttca	acagcacgtt	ccgtgtgggtc	agcgtcctca	ccgtcctgca	900
33	ccaggactgg	ctgaacggca	aggagtacaa	gtgcaagggtc	tccaacaaaag	ccctcccagc	960
34	ccccatcgag	aaaaccatct	ccaaaaccaa	aggacagccc	cgagaaccac	aggtgtacac	1020
35	cctgccccca	tcccgggagg	agatgaccaa	gaaccagggtc	agcctgacct	gcctgggtcaa	1080
36	aggcttctac	cccagcgaca	tcgccgtgga	gtgggagagc	agcgggcagc	cggagaacaa	1140
37	ctacaacacc	acgcctccca	tgctggactc	cgacggctcc	ttcttctctt	acagcaagct	1200
38	caccgtggac	aagagcaggt	ggcagcaggg	gaacatcttc	tcattgctccg	tgatgcatga	1260
39	ggctctgcac	aaccgcttca	cgcagaagag	cctctccctg	tctccgggta	aatgagtgcg	1320
40	acggccggca	agcccccgct	ccccgggctc	tcgggggtcg	gcgaggatgc	ttggcacgta	1380
41	ccccgtgtac	atacttcccc	ggcaccacgc	atggaaataa	agcaccacgc	gctgccctgg	1440
42	gccccctg						1449

44 <210> SEQ ID NO: 2

45 <211> LENGTH: 3825

ENTERED

RAW SEQUENCE LISTING

DATE: 04/08/2002

PATENT APPLICATION: US/09/909,567B

TIME: 14:42:42

Input Set : N:\Crf3\03272002\I909567.raw

Output Set: N:\CRF3\04082002\I909567B.raw

```

46 <212> TYPE: DNA
47 <213> ORGANISM: Homo sapien
48 <220> FEATURE:
49 <221> NAME/KEY: misc_feature
50 <222> LOCATION: (428)..(428)
51 <223> OTHER INFORMATION: a, c, g, or t
52 <220> FEATURE:
53 <221> NAME/KEY: misc_feature
54 <222> LOCATION: (430)..(430)
55 <223> OTHER INFORMATION: a, c, g, or t
56 <220> FEATURE:
57 <221> NAME/KEY: misc_feature
58 <222> LOCATION: (1997)..(1998)
59 <223> OTHER INFORMATION: a, c, g, or t
60 <400> SEQUENCE: 2
61      ttagtcacgt gaaaacccat caggaaatta aacttgatga tagcaacatt cctcctccct      60
62      ctttaaaaaac acgcccaccg tcaccaactt ttatcacaat agaatctact gcccgacgaa      120
63      cagaaaaaccc tactaagaac gagctttctc agtcccctaa aaaggacagt tatgttgaac      180
64      ccccaccaag aaggcccatg tcgcaaaaat ctgaaattca cagagcaaac acttcccctt      240
65      ctccacccag gagtcgctct gaacaacttg tcagactcaa agacaccact gcaaagttat      300
66      ccaaaggggc catcccatgt ccagcagcaa ccccggttcc aattgtagag aagaggctctg      360
67      aaatcatcat gtctcctgca acacttcgtc gtcaaattaa gatagaaact cgtggtaggg      420
W--> 68      actctccnan ctacaatcac aataccagta aatataaatc atgctgctag tggttccttc      480
69      agagaatctg tggacgctca agaggaaatc aggaaagtgg agaagagagc tacttatgtt      540
70      cataaagatg gactaaattc cactgatcac atggtgcccc acactgaaag ttatgatgca      600
71      gttgaaatca tccgcaaggt tgcagtgcct cctcgctgtg cagagcacac acagagatat      660
72      gaagcggcc aaccgaactg tcaaattggc gaaaatttgc tgaatgaccc tgaatatgaa      720
73      ataaacagat gggttcaggga atttgagcat ggcccagttt ctgaagcaaa gtcaaataga      780
74      agagtttatg caaagggaga aacaaacccat aacatacaac aagaaagtcg tacattttgt      840
75      aaggaggaat ttggattaac atcttttagga aacacgagtt ttacagactt ttcttgcaaa      900
76      catcctagag aactgcgaga aaagattcct gttaagcagc ccaggatctg ctctgaaacc      960
77      aggtctctaa gtgaacattt ctcaggcatg gatgcatttg agagtcaaat tgttgagtcg      1020
78      aagatgaaaa cctcttcacg acatagctca gaagctggca aatctggctg tgacttcaag      1080
79      catgccccac caacctatga ggatgtcatt gctggacata ttttagatat ctctgattca      1140
80      cctaaagaag taagaaaaaa ttttcaaaag acgtggcaag agagtggaa agttttttaa      1200
81      ggcttgagg atgcaaccgc agatgcttct gcaactgaga tgagaaccac cttccaagag      1260
82      gaatctgcat ttataagtga agctgctgct ccaagacaag gaaatatgta tactttgtca      1320
83      aaagacagtt tatccaatgg agtgcctagt ggcagacaag cagaattttc ataagtcctg      1380
84      cttccgatgc caccattgca acagttaaact aagtttggga aattatgcat cacttcattg      1440
85      acaaataatac tgtaaacctc acttttaaca acttttcaaa tccaaaggaa attatgatga      1500
86      aggttttgga cataagcagc ataaagatag atggaaactg aaaaaccaa gcagatcagt      1560
87      ggactttatt cctaataaag aaccaaatat gtgtaaaaat attgcagaaa acacccttgt      1620
88      acctggagat cgtaataaac atttagatgc tggtaacagt gaagggcaaa ggaatgattt      1680
89      gagaaaatta ggggaaaggg gaaaattaaa agtcatttgg cctccttcca aggagatccc      1740
90      taagaaaacc ttaccctttg aggaagagct caaatgagt aaacctaatg ggccacctga      1800
91      aatgacaacc ctgctatccc ctgaatttaa aagtgaatct ctgctagaag atgttagaac      1860
92      tccagaaaat aaaggacaaa gacaagatca ctttccattt ttgcagcctt atctacagtc      1920
93      caccatggtt tgtcagaaag aggatgttat aggaatcaaa gaaatgaaaa tgccctgaag      1980
W--> 94      aagaaaagat gaaaagngg aaggaaggaa gaatgtgcaa gataggccga gtgaagctga      2040

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/909,567B

DATE: 04/08/2002

TIME: 14:42:42

Input Set : N:\Crif3\03272002\I909567.raw

Output Set: N:\CRF3\04082002\I909567B.raw

95	agacacaaag agtaacagga aaagtgcctat ggatcttaaat gacaacaata atgtgattgt	2100
96	gcagagtgtc gaaaaggaga aaaatgaaaa aactaaccaa actaatgggtg cagaagtttt	2160
97	acaggttact aacactgatg atgagatgat gccagaaaat cataaagaaa atttgaataa	2220
98	gaataataat aacaattatg tagcagtcctc atatctgaat aattgcaggc agaagacatc	2280
99	tattttagaa tttcttgatc tattaccctt gtcgagtga gcaaatgaca ctgcaaatga	2340
100	atatgaaatt gagaagttag aaaatacatc tagaatctca gagttacttg gtatatattga	2400
101	atctgaaaag acttattcga ggaatgtact agcaatggct ctgaagaaac agactgacag	2460
102	agcagctgct ggcagtcctg tgcagcctgc tccaaaacca agcctcagcc agaggcctta	2520
103	tggtaaagg ggggaagttca atcatctctc ctgatacaaa tctcttaaac attaaaggaa	2580
104	gccattcaaa gagcaaaaat ttacactttt tcttttctaa caccgtgaaa atcactgcat	2640
105	tttccaagaa aaatgagaac attttcaatt gtgatttaat agattctgta gatcaaatta	2700
106	aaaatatgcc atgcttgat ttaagggaat ttggaaagga tgttaaacct tggcatgttg	2760
107	aaacaacaga agctgccgc aataatgaaa acacagggtt tgatgctctg agccatgaat	2820
108	gtacagctaa gcctttgtt cccagagtgg aggtgcagtc agaacaactc acggtggaag	2880
109	agcagattaa aagaacagg tgctacagt acactgagta aaatatctat ggccactgac	2940
110	agtccacact taggcactga gagatattga tgttctgaaa taagatttta tgaatttgga	3000
111	tacccttttg aggaacttga tgtaaacatg gtgttcagaa atctcgtgtc tatctcaatg	3060
112	ggatatttct tgtattacac cttgtcattt ttttcacaat ttatttacat ctacttttgt	3120
113	ttgaactgga atgaagagat gaaacactat ggatatgtt tccattcaaa tggcacttta	3180
114	gcattattgt ctgttttct gtaaaacatc atgggtgtga tttttatact gctgctgctt	3240
115	gtcacaatta ttataacttc tctgtaattt cctctgaaat aaaattgaat cacctgaggt	3300
116	gcaaaccaaa atacttctgt aacttttttt gatataact gtcattctaa gtacataatac	3360
117	tcttgtgac ttgggaagta ttgtcttga ggcgaagtatt taccaccac actaaaataa	3420
118	tgctggaaaa aataaaatac taaactgaag gcacagtatt attagaaagt gtaacatttt	3480
119	cattttctct tttactccac attttaaaaga tacgaggggt attgttcttg aaataattac	3540
120	ctatattaaa ttatcataga atgtgtctat aaacatttga cgaaaaatgt tgattttcct	3600
121	ccagaataat gtgaagtcca tactcagaaa ttaactagaa aggtttttaga cattacttaa	3660
122	ataaattatt cacattgcat ttgtattgct tgctctgtgt aatggataag tataacaatc	3720
123	atatcactac agtttgtcag gttttcttct tatcataatt gatgaatatt aagtttttct	3780
124	gttatgaaaa catattcctc taaaatttgg cttctaaatt ttcta	3825
126	<210> SEQ ID NO: 3	
127	<211> LENGTH: 2315	
128	<212> TYPE: DNA	
129	<213> ORGANISM: Homo sapien	
130	<400> SEQUENCE: 3	
131	gtaagcagca gttgattaga attaaatgag cttgaatttg attctgacat tcatattgat	60
132	ttgtccttcc ctcaaaaaac accctgagta tggacagggc ttcccgaactc tgcagactac	120
133	acgcgctcca tgagcagtgcc ccagggtgtca ttacctgccc atgagatgtg acctgggcag	180
134	gggtcccccac ctgtaccctt gggccccagg aggggaagccc agcatgtcag gctgaagcgg	240
135	gggtgcttcc agagatggcc atgcagagca gccctccgc ctcgggtcct gagggccgc	300
136	tcagtgggtcc cccactctg cagaatgtgc acccccagct ctgatgtctc ttccagggtga	360
137	aatccgggtc cccggccgtg ctggcattcg caaaggagaa gtcttttggg tggcccagct	420
138	tcatcacata cacggtcggc gtctcggacc ccgcggctgg cagccaagg cctctgtcca	480
139	ctaccctgac cttctccagc cccgtgacca accaagccat tgccatccca gtgacagtgg	540
140	cttttgtgat ggatcgccgt gggcccggtc cttatggagc cagcctcttc cagcacttcc	600
141	tggattccta ccaggtcatg ttcttcacgc tcttcgccct gttggctggg acagcgtca	660
142	tgatcatagc ctaccacact gtctgcacgc cccgggatct tgctgtgcct gcagccctca	720
143	cgcctcgagc cagccctggg acacagcccc cactatttct ctgcctcatc acccacatct	780
144	cccaatgcat tgcctcctgc tcgcaaaagg agccctccct cagggctgtg gagcccaggc	840

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/909,567B

DATE: 04/08/2002

TIME: 14:42:42

Input Set : N:\Crf3\03272002\I909567.raw

Output Set: N:\CRF3\04082002\I909567B.raw

```

145 ctatggcctc ccaactagggc cgcgtgaagg ttcccggagg atgggggtctc agccgagcct 900
146 cgttgcaacc cccaagatgg aacatcccctt gctgcattca cactggaaca agcccctcca 960
147 gatgagtgcc ccggcccccag gccagcttca ctgccgtctc ttcacacaga gctgtagttt 1020
148 cggctctgcc cattagctca ttttatgtag gagttttaaa tgtgtgtttt tttcctttca 1080
149 agtcttacaa agctaagact ttttggctca ttcccttttg catggttgtc tagggtttct 1140
150 ggacaatgtg ctgttgcaatt tttattttcc tagccttgct aaaatccttc ccttctcaag 1200
151 actttgagca gttagaagtg ctcttttagaa gttgtctgtg ggtgatgtta ctgtagtgg 1260
152 ctacagggaaa ggattgtcca gttacttttag ggggtttttg gtgggggtttt tccccctgtg 1320
153 aaaacttact ttgcccctag tctggctgct gctaggactt ctgaggagca atgggacatg 1380
154 agtgtccctg tatctgcgcc actgccgcaa gggaaagcctc aggaaccagc acctggaggc 1440
155 caggatagcc aagccctggg tgagcgagag gctggagaac acaggagctc acccagggct 1500
156 gctgcccac catggggcac tgtgaacaga cttcagtcct ctgtttttgt ttcataagcc 1560
157 gttgagacat ctgatggact tggcttaggc cctgctggga catcccacgt gtgatccctt 1620
158 tcaactccatc aggaaccag gactgtcctt aggaataatgt ccttgagatg gcagcaggag 1680
159 tcatattttc tgtgtgtgtg tttcggaaaag ccgctgtgtc ctgcctcagc acaaagaccc 1740
160 agtgtcattt gtcctcctg ttcctgtgcc actccagaac ctcagcagat ctgagccacc 1800
161 gcctgccagt gtgagaggcg gccactttca tggcagctca tcaggcgagc ggccccagac 1860
162 agcttcccag caggccctag agcccggcct gggccaatga tggagggcgg ccgccagccc 1920
163 agggcctgcc catccagaag ggaactcccca gggcctgggg gaggagaccc ttggaaaagt 1980
164 cctctcttcc cagctcctga ttctggatct gagattctca gatcacaggc cctgtgtctc 2040
165 caggccgagg ctgggctacc ctcagggaga tccagagact catgcccatt gccatccatt 2100
166 cgtggacgct gtgtggagag tccaggatga cgggatccc cacaagctcc cttcagtcct 2160
167 tcagggctgg gccatgtggt tgatttttct aaagctggag aaaggaagaa ttgtgccttg 2220
168 catattactt gagcttaaac tgacaacctg gatgtaaata ggagcctttc tactggttta 2280
169 tttataaaaag ttctatgtga tttttaaaaa aaaaaa 2315

```

171 <210> SEQ ID NO: 4

172 <211> LENGTH: 300

173 <212> TYPE: DNA

174 <213> ORGANISM: Homo sapien

175 <220> FEATURE:

176 <221> NAME/KEY: misc_feature

177 <222> LOCATION: (8)..(8)

178 <223> OTHER INFORMATION: a, c, g or t

179 <400> SEQUENCE: 4

```

W--> 180 agcatganaa aggtgaaggc tgccgggtggc acgggggctcg gatctgctgc cgggcccagc 60
181 tgggagagcc atgaggctgt atgtgatggg gcacctcttg ggtgcacact ttggatgaca 120
182 agtgcctcca agaggagcca gggctggctg cagtgaaggc ccaggagggt ctccaggggc 180
183 gtcctgcttc agctcaaggg gctaggaata ggggaaacga tgcagggaag ccaatggccc 240
184 aagtggctcc ctcactgact gttacttgct gtgtatgtct ctttcttttc ttttttttcc 300

```

186 <210> SEQ ID NO: 5

187 <211> LENGTH: 4347

188 <212> TYPE: DNA

189 <213> ORGANISM: Homo sapien

190 <400> SEQUENCE: 5

```

191 gcggtgcggc ggcgggaggc ggaggcgagg gtgcgatggc gcggagcccg ggacgcgcgt 60
192 acgcccctgct gcttctcctg atctgcttta acgttggaa gggacttcac ttacagggtct 120
193 taagcacaag aaatgaaaaat aagctgcttc ctaaaacatcc tcatttagtg cggcaaaaagc 180
194 gcgcctggat caccgcccccc gtggctcttc gggaggggaga ggatctgtcc aagaagaatc 240
195 caattgccaa gatacattct gatcttgcat aagaaaaggg actcaaaaatt acttacaaat 300

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/909,567B

DATE: 04/08/2002

TIME: 14:42:42

Input Set : N:\Crf3\03272002\I909567.raw

Output Set: N:\CRF3\04082002\I909567B.raw

196	acactggaaa	agggattaca	gagccacctt	ttggtatatt	tgtctttaac	aaagatactg	360
197	gagaactgaa	tgttaccagc	attcttgatc	gagaagaaac	accatttttt	ctgctaacag	420
198	gttacgcttt	ggatgcaaga	ggaaacaatg	tagagaaacc	cttagagcta	cgcattaagg	480
199	ttcttgatat	caatgacaac	gaaccagtgt	tcacacagga	tgtctttggt	gggtctgttg	540
200	aagagttgag	tgcagcacat	actcttgta	tgaaaatcaa	tgcaacagat	gcagatgagc	600
201	ccaataccct	gaattcgaaa	atttcctata	gaatcgtatc	tctggagcct	gcttatcctc	660
202	cagtgttcta	cctaaataaa	gatacaggag	agattttatac	aaccagtgtt	accttgga	720
203	gagaggaaca	cagcagctac	actttgacag	tagaagcaag	agatggcaat	ggagaagtta	780
204	cagacaaacc	tgtaaaacaa	gctcaagttc	agattcgtat	tttggatgtc	aatgacaata	840
205	tacctgtagt	agaaaataaa	gtgcttgaag	ggatgggtga	agaaaatcaa	gtcaacgtag	900
206	aagttacgcg	cataaaagt	ttcgtatgag	atgaaatagg	ttctgataat	tggctggcaa	960
207	attttacatt	tgcatacagg	aatgaaggag	gttattttcca	catagaaaca	gatgctcaaa	1020
208	ctaacgaagg	aattgtgacc	cttattaagg	aagtagatta	tgaagaaatg	aagaatcttg	1080
209	acttcagtgt	tattgtcgct	aataaagcag	cttttcacaa	gtcgattagg	agtaaataca	1140
210	agcctacacc	cattcccatc	aagggtcaag	tgaaaaatgt	gaaagaaggc	attcatttta	1200
211	aaagcagcgt	catctcaatt	tatgttagcg	agagcatgga	tagatcaagc	aaaggccaaa	1260
212	taattggaaa	ttttcaagct	tttgatgagg	acactggact	accagcccat	gcaagatatg	1320
213	taaaattaga	agatagagat	aattggatct	ctgtggattc	tgtcacatct	gaaattaaac	1380
214	ttgcaaaact	tcctgatttt	gaatctagat	atgttcaaaa	tggcacatac	actgtaaaga	1440
215	tttgggccat	atcagaagat	tatcctagaa	aaaccatcac	tggcacagtc	cttatcaatg	1500
216	ttgaagacat	caacgcacaac	tgtcccacac	tgatagagcc	tgtgcagaca	atctgtcacg	1560
217	atgcagagta	tgtgaatgtt	actgcagagg	acctggatgg	acacccaaac	agtggccctt	1620
218	tcagtttctc	cgtcattgac	aaaccacctg	gcatggcaga	aaaatggaaa	atagcacgcc	1680
219	aagaaagtac	cagtgtgctg	ctgcaacaaa	gtgagaaaaa	gcttggggaga	agtgaatttc	1740
220	agttcctgat	ttcagacaat	cagggtttta	gttgtcctga	aaagcagggtc	cttacactca	1800
221	cagtttctga	gtgtctgcat	ggcagcggtc	gcaggggaagc	acagcatgac	tcctatgtgg	1860
222	gcctgggacc	cgcagcaatt	gcgctcatga	ttttggcctt	tctgtccttg	ctattggtac	1920
223	cacttttact	gctgatgtgc	cattgcggaa	agggcgccaa	aggctttacc	cccatacctg	1980
224	gcaccataga	gatgctgcat	ccttggaata	atgaaggagc	accacctgaa	gacaagggtg	2040
225	tgccatcatt	tctgccagtg	gatcaagggg	gcagtctagt	aggaagaaat	ggagtaggag	2100
226	gtatggccaa	ggaagccacg	atgaaaggaa	gtagctctgc	ttccattgtc	aaagggcaac	2160
227	atgagatgtc	cgagatggat	ggaaggtggg	aagaacacag	aagcctgctt	tctggtagag	2220
228	ctaccagtt	tacaggggcc	acaggcgcta	tcatagaccac	tgaaccacg	aagaccgcaa	2280
229	gggccacagg	ggcttccaga	gacatggccg	gagctcaggc	agctgctgtt	gcaactgaacg	2340
230	aagaattctt	aagaaattat	ttcactgata	aagcggcctc	ttacactgag	gaagatgaaa	2400
231	atcacacagc	caaagattgc	cttctggttt	attctcagga	agaaactgaa	tcgctgaatg	2460
232	cttctatttg	ttgttgagc	tttattgaag	gagagctaga	tgaccgcttc	ttagatgatt	2520
233	tgggacttaa	attcaagaca	ctagctgaag	tttgctggg	tcaaaaaata	gatataaata	2580
234	aggaaattga	gcagagacaa	aaacctgcca	cagaaacaag	tatgaacaca	gcttcacatt	2640
235	cactctgtga	gcaaaactag	gttaattcag	agaataccta	ctcctctggc	agtagcttcc	2700
236	cagttccaaa	atctttgcaa	gaagccaatg	cagagaaagt	aactcaggaa	atagtcactg	2760
237	aaagatctgt	gtcttctagg	caggcgcaaa	aggtagctac	acctcttctt	gacccaatgg	2820
238	cttctagaaa	tgtgatagca	acagaaactt	cctatgtcac	aggggtccact	atgccaccaa	2880
239	ccactgtgat	cctgggtcct	agccagccac	agagccttat	tgtgacagag	aggggtgatg	2940
240	ctccagcttc	taccttggtg	gatcagcctt	atgctaata	aggtacagtt	gtggctcactg	3000
241	aaagagtaat	acagcctcat	gggggtggat	cgaatcctct	ggaaggcact	cagcatcttc	3060
242	aagatgtacc	ttacgtcatg	gtgagggaaa	gagagagctt	ccttgccccc	agctcagggtg	3120
243	tgcagcctac	tctggccatg	cctaataatag	cagtaggaca	gaatgtgaca	gtgacagaaa	3180
244	gagttctagc	acctgcttcc	actctgcaat	ccagttacca	gattccctact	gaaaattcta	3240

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/909,567B

DATE: 04/08/2002
TIME: 14:42:43

Input Set : N:\Crf3\03272002\I909567.raw
Output Set: N:\CRF3\04082002\I909567B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 428,430,1997,1998
Seq#:4; N Pos. 8
Seq#:7; N Pos. 9
Seq#:8; N Pos. 269,270,271,272,273,274,275,276,277,278,279,280,281,282,283
Seq#:8; N Pos. 284,285,286,287,288,289,290,291,292,293,294,295,296,297,298
Seq#:8; N Pos. 299,300,301,302,303,304,305,306,307,308,309,310,311,312,313
Seq#:8; N Pos. 314,315,316,317,318,319,320,321,322,323,324,325,326,327,328
Seq#:8; N Pos. 329,330,331,332,333,334,335,336,337,338,339,340,341,342,343
Seq#:8; N Pos. 344,345,346,347,348,349,350,351,352,353,354,355,356,357,358
Seq#:8; N Pos. 359,360,361,362,363,364,365,366,367,368,369,370,371,372,373
Seq#:8; N Pos. 374,375,376,377,378,379,380,381,382,383,384,385,386,387,388
Seq#:8; N Pos. 389,390,391,392,393,394,395,396,397,398,399,400,401,402,403
Seq#:8; N Pos. 404,405,406,407,408,409,410,411,412,413,414,415,416,417,418
Seq#:8; N Pos. 419,420,421,422,423,424,425,426,427,428,429,430,431,432,433
Seq#:8; N Pos. 434,435,436,437,438,439,715,716,743,750,753
Seq#:17; N Pos. 268
Seq#:18; N Pos. 892
Seq#:19; N Pos. 6,14,25,28,30,32,34,54,60,66,67,83,85,92,95,103,104,145,152
Seq#:19; N Pos. 161,179,197,222,238,246,249,258,266,273,274,276,284,286,290
Seq#:19; N Pos. 299,324,328,335,347
Seq#:22; N Pos. 17,27,29,30,91,105,113,179,187,190,212,244,308,311,318,320
Seq#:22; N Pos. 321,323,325,326,327,329,330,344,348,350,352
Seq#:38; N Pos. 1001,1011

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 4

VERIFICATION SUMMARY

DATE: 04/08/2002

PATENT APPLICATION: US/09/909,567B

TIME: 14:42:43

Input Set : N:\Crf3\03272002\I909567.raw

Output Set: N:\CRF3\04082002\I909567B.raw

L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:420
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:1980
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:240
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:300
L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:360
L:424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:420
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:660
L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:720
L:912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:240
L:938 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:840
L:1129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:1130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:60
L:1131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:120
L:1132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:180
L:1133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:240
L:1134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:300
L:1327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:1328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:60
L:1329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:120
L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:180
L:1331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:240
L:1332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:300
L:1620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:960